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PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Patent Application of )

RAYMOND C. MCGARVEY )

Serial No. 07/937,560 )

Filed: August 31, 1992 )

For: MINIMUM DEAD VOLUME )  
FITTING )

Group Art Unit 2406

Examiner S. Cummings

20/Reply  
Brief

20

1/3/94

95-3431

REPLY BRIEF

Honorable Commissioner  
of Patents and Trademarks  
Washington, D.C. 20231

Sir:

Translation of PCT '3495

A copy of a translation of the WO 89/03495 reference was submitted on October 7, 1992 in Serial No. 07/694,066, of which the present application is a CIP.

This is in reply to the following new points of argument in the Examiner's Answer mailed October 18, 1994.

I. Examiner's Arguments re Grouping of Claims

With respect to the Examiner's comments on page 2 of his Answer concerning the grouping of claims, the appellant points out that claims 18 and 22 were differentiated from claims 1-17 on page 7 of the Appeal Brief for the reason that claims 18 and 22 do not contain the term "substantially equal", which was the expression that the Examiner found to be indefinite under 35 U.S.C. 112. It

was also pointed out that claim 22 does not contain the term "substantially". The term "substantially" is essential to the rejection under 35 U.S.C. 112. The Examiner has not found that "equal", which appears without "substantially" in claim 22, is indefinite. Furthermore, the appellant points out that the term "equal" rather than "substantially equal" also appears in claims 6-17. The appellant also pointed out on page 7 of the brief that claim 18 does not contain the expression "substantially equal" but rather the expression "substantially the same diameter".

It is submitted that the rejection of claim 23 on the ground of obviousness-type double patenting should be considered separately from the rejection of claims 19 and 20 on the ground of obviousness-type double patenting for at least the reason that the rejection of claim 23 relies on the Leigh reference and the rejection of claims 19 and 20 does not.

**II. New Examiner Argument that the Indefiniteness of Claims 1-18 and 22 Stems from the Fact that Examiner and Appellant Disagree About the Proper Scope and Interpretation of the Claims**

With respect to the new argument by the Examiner at the bottom of page 4 of the Answer that the indefiniteness of claims 1-18 and 22 stems from the fact that the Examiner and appellant disagree about the proper scope and interpretation of the claims in light of the specification and file wrapper history, the appellant submits that such disagreement does not support a finding that the claims are indefinite. In his argument, the Examiner also states that the indefiniteness of claims 1-18 and 22 does not stem from the language "substantially equal" being inherently indefinite. Thus,

it appears that the Examiner agrees that the term "substantially equal" in itself is definite. Since the expression itself is definite, the appellant submits that he is entitled to the coverage provided by the clear meaning of the term "substantially equal". The appellant submits that "substantially equal" refers to things which are precisely equal, as well as things which may have some deviation from one another. In this regard, the appellant refers to the argument beginning on the bottom of page 7 of the appeal brief and ending at the bottom of page 8, and especially the In re Faunce decision in which the CCPA held that "substantially equal proportions" means that although the proportions may vary slightly, neither will appreciably predominate. It is believed that the CCPA indicated by this decision that "substantially equal" provides for slight variance from exactly equal. Thus, it is again submitted that the claims of the present application calling for the diameters to be "substantially equal" encompasses diameters which are precisely equal, as well as diameters in which there is slight variance. Accordingly, the expression "substantially equal" as used in the claims encompasses all of the disclosed embodiments of the present invention.

The Examiner's argument that the indefiniteness stems from the fact that the Examiner and the appellant disagree about the proper scope and interpretation of the claims in light of the specification and file wrapper history appears to be presented as a basis for rejecting the claims not because they are indefinite but because there is disagreement about the scope of the claims.

However, disagreement between an applicant and the Examiner about the scope of protection of a claim whose terms are definite does not seem to be a ground, provided in the statute or rules, for rejecting claims of the application. In this case, the Examiner's basis for rejecting the claims under 35 U.S.C 112 appears to be on the theory of prosecution history estoppel based upon comments made by the applicant during the prosecution of the application. Again, it is submitted that this is no reason to reject the claims.

Furthermore, there is no such prosecution history estoppel. The Examiner stated that the appellant is seeking to distinguish the two embodiments from each other, and he referred to, for example, page 10, lines 21-37 of the specification. The fact is that there is a difference between the two embodiments. Otherwise, there would be only one embodiment. The difference is described in the lines referred to by the Examiner, especially by the statement referring to the embodiment of Figs. 3 and 4: "The inner annular surface 39' will be enlarged so that its diameter is slightly greater than, although still substantially equal to, the inner diameter of the axially farthest projecting portions of the noses 36 and 38 when the fitting 10 is fully tightened". This description points out that the diameter of the inner annular surface 39' will be slightly greater than another diameter. Therefore, the term "equal" does not apply to the aforementioned diameters of the embodiment of Figs. 3 and 4. It clearly applies to the embodiment of Figs. 1 and 2. Therefore, "equal" was used in describing the embodiment of Figs. 1 and 2, while "substantially

"equal" was chosen because it is an accurate expression in describing the embodiment of Figs. 3 and 4. However, the fact that "equal" does not apply to both embodiments does not mean that "substantially equal" does not apply to both embodiments. If one considers the ordinary meanings of the terms "equal" and "substantially equal", "equal" applies to the embodiment of Figs. 1 and 2, but not to the embodiment of Figs. 3 and 4, whereas "substantially equal" applies to both embodiments because, in the terms of J. R. Clark Co. v. Jeuder, Paeschke & Frey Co. cited on page 8 of the appeal brief, there is more flexibility in "substantially equal" than in "equal" alone.

The appellant did not state or argue in the application or prosecution that "substantially equal" applies only to embodiments like that of Figs. 3 and 4.

Thus, the appellant disagrees with the Examiner's new argument that appellant's representations earlier in the prosecution indicate that the term "substantially equal" was not intended to be a generic expression of the embodiments. For support of his position, the Examiner refers to page 2 of the amendment dated July 20, 1993, as is quoted on page 5 of the Examiner's Answer. However, it is submitted that nothing in the quoted statement indicates that the appellant considered the claim language "substantially equal" to cover only the embodiment where the small difference in diameters exists.

The lines from the amendment quoted by the Examiner do not refer to embodiments but rather to specific disclosed structure.

Please note that the quoted statements do not refer to the embodiment of Figs. 1 and 2 but rather to the tightened condition shown in Fig. 1. Reference to that figure shows that there is an exact equality. Therefore, the term "equal" was believed to be accurate for that structure and was used in the claims in connection with that structure. Just prior to the quoted statements, the appellant described a small structural difference for which the claim language "substantially equal" was used. There is no explicit or implicit indication in this statement that "substantially equal" does not also apply to the tightened condition shown in Fig. 1. The appellant believed it was necessary to make the distinction because the term "equal" is not considered to be accurate for the small difference previously described on that page. Overall, "substantially equal" was used in the claims where "equal" was not accurate. That does not mean that "substantially equal" does not include structures where there is precise equality, and no statements or amendments have been made in the prosecution of the present application to imply that "substantially equal" does not include structures in which there is precise equality.

**III. New Examiner Argument that Appellant's Arguments  
re "Substantially Equal" Being a Generic Expression  
are an Afterthought**

With respect to the Examiner's new argument at the bottom of page 5 of the Answer that the appellant's current arguments that the term "substantially equal" is a broader generic expression of both embodiments is an after-thought, the appellant points out that

at no time was the language "substantially equal" intended to be limited to embodiments where there was not precise equality. It is submitted that the Examiner's interpretation of the quoted material from the remarks of the amendment dated July 20, 1993 should have at least been called into question in view of the appellant's statement in the same amendment that claim 23, for example, reads on the elected embodiment. Claim 23 calls for the inner diameter of the gasket to be "substantially equal" to the inner diameter of the farthest extending portions of the annular end formations as a part of the tightening step. The elected species, the species of Figs. 1, 2, 5 and 6, shows in Figs. 1 and 5 the face seal fitting in a tightened condition in which the inner diameter of the gasket is precisely equal to the inner diameter of the farthest extending portions of the annular end formations. The statement by the appellant of the claims which read on the elected species makes clear that the appellant remark quoted by the Examiner is not a statement that "substantially equal" refers only to embodiments in which there is not precise equality. Furthermore, as soon as the Examiner expressed his finding that the Examiner disagreed with the claims which read on the elected invention and that the disagreement was based upon the terms "equal" and "substantially equal", the appellant addressed the issue in his next response, the amendment filed on January 5, 1994. In the only full paragraph on page 2 of that amendment, the appellant explained that claims which use the term "substantially equal" encompass the species of Figs. 1, 2, 5 and 6, as well as other species, since things which are

equal are "substantially equal". A more detailed explanation was presented at that place. It is submitted that the position of the appellant in this regard has been clear from the time of the amendment quoted by the Examiner and, thus, was not "an afterthought".

**IV. New Examiner Argument that the Present Application is Unlike In re Braat**

With respect to the obviousness double patenting rejection of claims 19, 20 and 23, the Examiner makes the new argument on page 6 of the Answer that the present application is unlike In re Braat for two reasons. His first reason is that, in the present situation, the applicant in the present application and in the patent cited against the present application are the same, whereas, in In re Braat, the applicant in the application was different from the applicant in the cited patent. However, the appellant points out that, in In re Braat, Judge Rich did not draw a distinction between situations in which the applicants were the same and situations in which the applicants were different. Instead, beginning at the bottom of the left column at 19 USPQ 2d 1292, he referred to that appellant's citation of In re Borah, the case that the appellant in this appeal cited in connection with In re Braat. Judge Rich described the proposition for which Borah was cited, namely, that when a later-filed improvement patent issues before an earlier-filed basic invention, a double patenting rejection is only proper against the claims to the basic invention if the improvement is not patentably distinct from the basic invention. Then, beginning at the bottom of the right column of the same page, he



found that the reasoning of Borah and 3 D. Chisum Patents § 9.03[2][c] (1990) is applicable in In re Braat, a situation in which the applicants in the application were different from the applicants in the cited patent. Judge Rich did not state or imply that the reasoning of Borah and Chisum do not apply where the applicant in the application is the same as the applicant in the patent. In fact, in Borah, the applicant named in the application and in the cited patent was the same.

With respect to the Examiner's statement on page 6 of the Answer that the appellant could clearly have sought to pursue a claim of the same scope as claims 19, 20 and 23 in his prior application, Serial No. 07/694,066, the appellant points out that the appellant could not have known that Serial No. 07/694,066 would issue before the present application would issue. Furthermore, in view of the continuing rejection of claim 19, 20 and 23 in the present application, there appears to be a reasonable likelihood that the allowance of Serial No. 07/694,066 would have been delayed and that the present application might have been allowed, if claims 19, 20 and 23 had been presented in Serial No. 07/694,066 rather than in the present application. Then, the appellant could have been subject in an appeal of Serial No. 07/694,066 to the same reasoning, namely that the appellant could clearly have sought to pursue a claim of the same scope as claims 19, 20 and 23 in Serial No. 07/937,570. Furthermore, the question of claiming the broader invention in another application appears to be covered in the analysis from In re Blattner, as was described in detail in the

paragraph bridging pages 14 and 15 of the appeal brief. Specifically, the present situation satisfies the condition described in In re Blattner that a generic claim was being prosecuted in a pending application at a time when the patent to the species was granted.

The Examiner's second reason, at the bottom of page 6 of his Answer, that the present case is unlike In re Braat is that the instant case does not present a situation where an improvement patent issues before an earlier filed basic invention. The appellant disagrees. As the Examiner stated, the '747 patent has a filing date of May 1, 1991. The application from which the '747 patent issued is not a continuing application based on any other application. The effective dates of the subject matter of the present application can be seen from the official filing receipt. It is pointed out that the present application is a CIP of Serial No. 07/694,066, the application from which the '747 patent issued. Therefore, the present application has an effective filing date of at least as early as May 1, 1991 for subject matter which is common to the present application and the application from which the '747 patent issued. Furthermore, all the subject matter of claims 19, 20 and 23 is disclosed in Serial No. 07/652,225, of which the present application is also a CIP. Serial No. 07/652,225 has a filing date of February 6, 1991, which is before the May 1, 1991 filing date of the application on which the '747 patent is based. The present application has an effective filing date of at least as early as February 6, 1991 for the subject matter of claims 19, 20

and 23. Moreover, Serial No. 07/652,225 is a continuation of Serial No. 07/392,460, which was filed on August 11, 1989. Thus, the subject matter of claims 19, 20 and 23 has an effective filing date of August 11, 1989. Thus, this case does present a situation in which an improvement patent issues before an earlier-filed basic invention. Therefore, the findings of Judge Rich in the Borah case do apply to the present situation.

The Examiner states that the appellant does not offer a separate ground of traversal for the rejection of claim 23. However, the appellant does present a separate ground of traversal for claim 23 as Item 4 on page 16 of the appeal brief. The separate ground of traversal is made for at least the reason that claim 23 was subjected to a separate ground of rejection from claims 19 and 20.

V. New Examiner Argument that a Ramping Effect is the Same Effect Claimed by Appellant to Achieve the Enlargement of the Inner Diameter of the Gasket

The Examiner makes the new argument on page 8 of his Answer that a ramping effect is the same effect claimed by the appellant to achieve the enlargement of the inner diameter of the gasket. The Examiner also states that the enlargement of the inner diameter of the gasket of PCT '3495 is inherently produced by engagement of the end formations with the beveled surfaces 24, 24' of the gasket. The appellant disagrees with these statements. The Examiner makes the further statement that the engagement of the sharply angled end formations 18, 18' with beveled surfaces 24, 24' is clearly sufficient to produce a resultant force that is radially outward,

and adds the clause "thereby acting to expand the inner diameter of the gasket" with which the appellant disagrees.

If one views Fig. 2 of PCT '3495, which contains the numerals referred to by the Examiner, one can see that the angled end formations 18, 18' engage the flat, radially extending surfaces 23, 23' at the same time they engage the beveled sealing faces 24, 24'. Tightening of the fitting beyond the condition illustrated in Fig. 2 is not disclosed in the reference. However, if, despite the lack of disclosure, one tightened the fitting beyond the condition shown in Fig. 2, the inner diameter of the gasket would not be expanded, but likely would be made smaller. More specifically, tightening beyond the condition shown in Fig. 2 would result in outward deformation of the beveled sealing faces 24 and 24'. However, this outward deformation would not cause the inner diameter of the gasket to move radially outward for the reason that the end faces of the annular beads are simultaneously engaging the flat, radially extending surfaces 23, 23' of the gasket. This engagement restrains this inner portion of the gasket from deforming radially outward with the beveled sealing faces 24, 24'. Furthermore, tightening beyond the condition shown in Fig. 2 would cause the inner portion of the gasket to be squeezed between the end surfaces of the opposing end formations 18, 18', thereby squeezing some of the material of the inner portion of the gasket radially inward, thereby reducing the diameter of the gasket. Under actual conditions, before the fitting of PCT '3495 reaches the condition of Fig. 2, the opening through the gasket is not aligned with the

openings through the glands 12 and 13. In that case, the angled surfaces 16, 16' of the end formations 18, 18' engage portions of the beveled surfaces 24, 24' on one side of the opening but not on the opposite side. Tightening from that condition causes centering of the gasket, but not enlargement of the inner diameter of the gasket, as is called for by claim 23. A more detailed description of this difference is described in Issue V. beginning at the bottom of page 16 of the appeal brief.

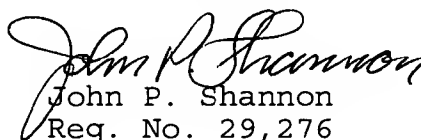
**VI. New Examiner Argument That the Only Logical Way to Accomplish a Structural Feature of White, When Applied in View of Leigh, Results in the Claimed Structure**

With respect to the rejection of claims 19, 20 and 23 under 35 U.S.C. 103, the Examiner contends at the bottom of page 9 of the Answer that the combination would have been obvious to one having ordinary skill in the art because the only logical way to accomplish the structural feature of White, when applied in view of the teachings of Leigh, results in the claimed structure. The appellant submits that one logical way of modifying Leigh in view of White to achieve the principle disclosed in White of eliminating pockets at the connection between pipes and a gasket is to use the structure disclosed in White. However, use of this structure would not result in the structure called for by claims 19, 20 and 23 on appeal. Thus, the only reference which discloses the desirability of eliminating pockets at the connection does so with a structure different from the structure of the present invention. Thus, White really teaches away from the structure of the present invention recited in claims 19, 20 and 23.

The Examiner also argues that the purposes of the recesses 4, 4 of White is to hold the parts truly central with each other during assembly. In such a case, elimination of the recesses 4, which would be required in order to satisfy the limitations of claims 19, 20 and 23, would eliminate the means to hold the parts truly central with each other during assembly. Since truly central arrangement of the parts is necessary for a minimum dead volume connection, it appears that the recesses 4, 4 should not be eliminated, although such recesses would be eliminated if the combination of the Leigh and White references were somehow to yield the structure of the present invention as defined in claims 19, 20 and 23. In any event, White includes the recesses 4 in the ends of the pipes.

It is again respectfully requested that the Board not sustain the rejections of the Examiner.

Respectfully submitted,

  
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Reg. No. 29,276

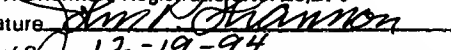
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